

IN THE CLAIMS:

The following is a complete listing of the claims, and replaces all earlier versions and listings.

Claims 1.-4. (Cancelled).

Claim 5. (Currently Amended) A manufacturing method for a semiconductor device substrate, comprising the steps of:
ejecting, in non-active gas, a metal oxide constituting a crystalline insulation layer;

forming a crystal layer of a crystalline insulative material on a silicon substrate heated up to not lower than 400°C; and

forming an insulative silicon compound layer on said the silicon substrate by oxygen diffusion from an oxide during said ~~crystal layer formation forming~~ step, oxygen diffusion during a temperature holding time after said ~~crystal layer formation forming~~ step and/or oxygen diffusion during a cooling operation.

Claim 6. (Currently Amended) A method according to Claim 5, wherein said the silicon substrate and said the target are disposed opposed to each other in a sputtering apparatus, and discharge of the non-active gas supplied into the sputtering apparatus is produced to grow the crystal layer of said the crystalline insulative material.

Claim 7. (Currently Amended) A method according to Claim 5, wherein said the target comprises ZrO₂ and Y₂O₃ which are mixed or which are solved[[;]], said the non-active gas is argon[[;]], said the crystalline insulation layer is YSZ[[;]], said the insulative silicon compound is silicon oxide and a component

constituting the crystalline insulation layer, which are contained in insulative silicon compound by diffusion, is Zr and/or Y.

Claim 8. (Original) A method for manufacturing SOI substrate comprising a method as defined in Claim 5, wherein crystalline silicon film is formed on the crystalline insulation layer which is formed on the silicon substrate.